

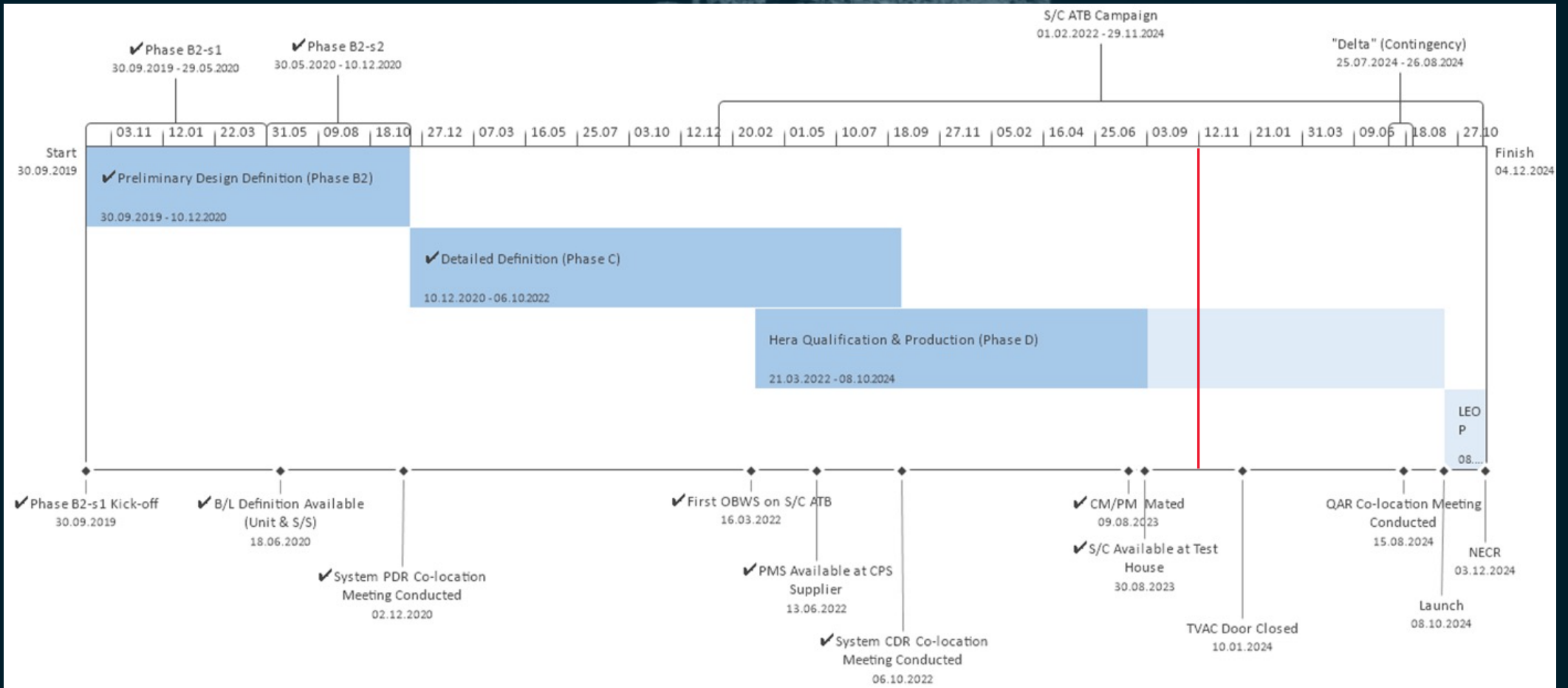
HERA MISSION STATUS

SMPAG October 2023

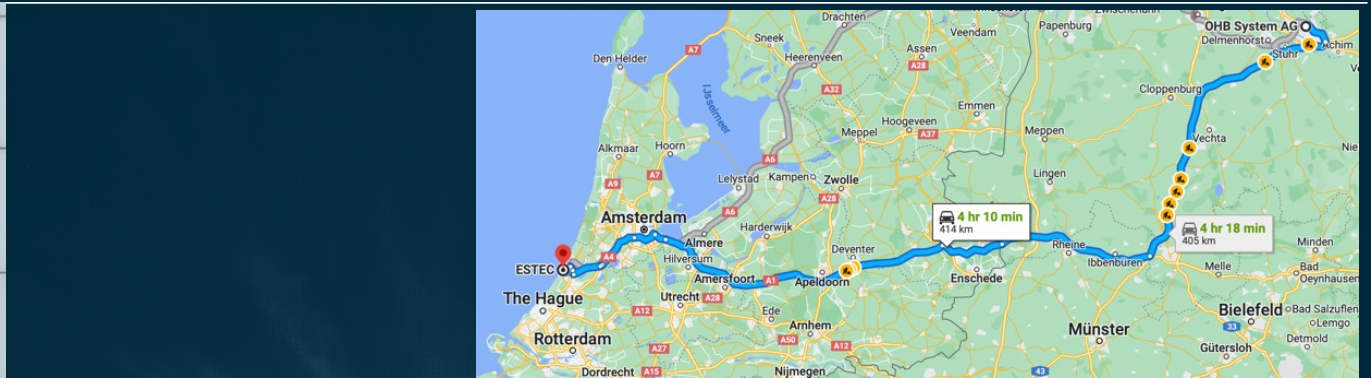
ESA UNCLASSIFIED - For ESA Official Use Only



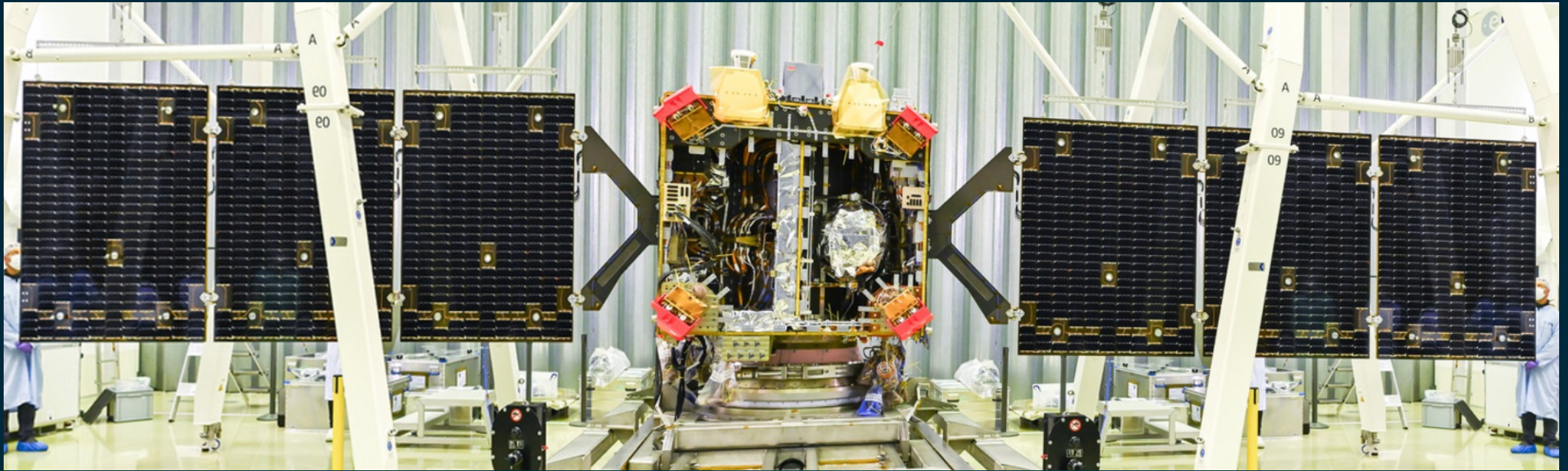
Integrated master schedule



Hera transport to ESTEC



Hera mechanical integration completed



Environmental test campaign

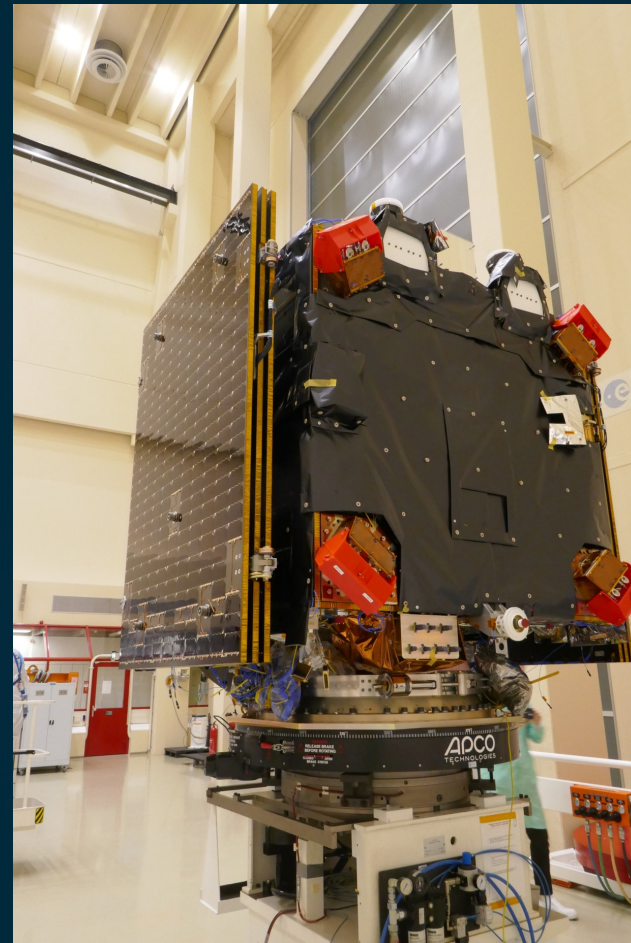
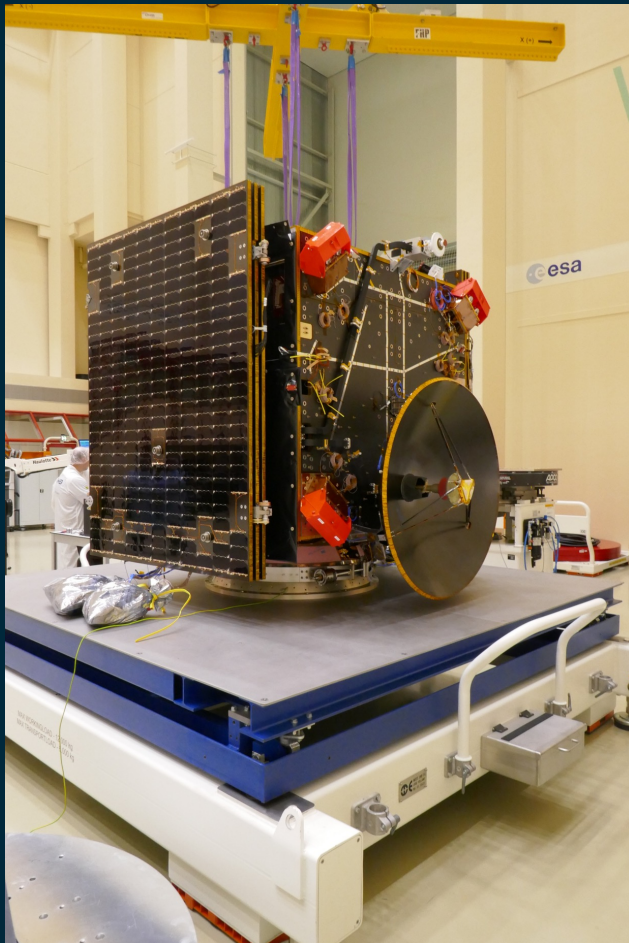
- ✓ Until 26 SEP: SAW cold deployment, thermistors and heaters crimping, LGA, HGA integration, MLI
- ✓ 28 SEP – 3 OCT: physical properties measurements
 - 9 – 23 OCT: vibration tests
 - 25 OCT – 2 NOV: acoustic test
 - 3 NOV – 18 DEC: functional tests (ISSTs for TCS, COM, DHS, FDIR, GNC, EPS, payload)
 - 19 – 21 DEC: TVAC rehearsal
 - 2 JAN – 22 Jan: TVAC



Successful SAW deployment test



Physical properties measurements



666.6 kg (dry)



Satellite integration activities: payloads

AFC

- Flight units **integrated**

PALT

- eBox successfully qualified and delivered
- PALTO integration ongoing
- **Late delivery** foreseen Dec 2023 / Jan 2024
- “PALTernative” will be integrated for mechanical tests

TIRI

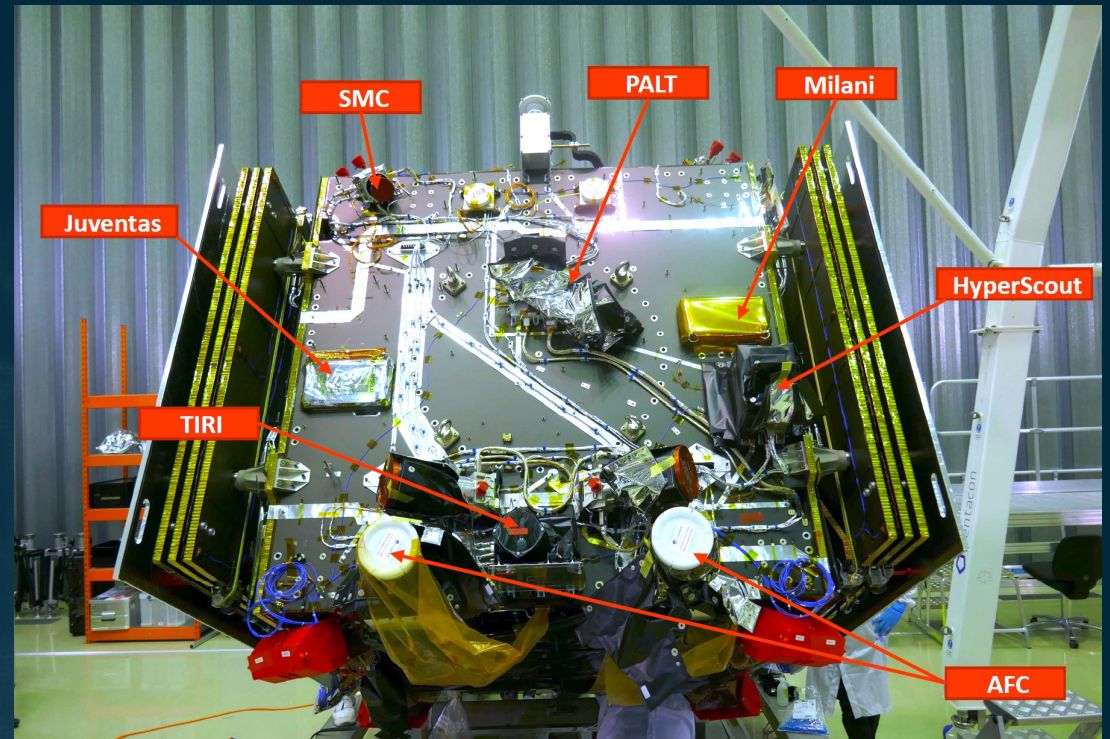
- EQM **integrated**
- PFM **in repair**, delivery to ESTEC planned by Dec 2023

Hyperscout-H

- PFM **integrated**, software update ongoing.

SMC

- FM **integrated**.

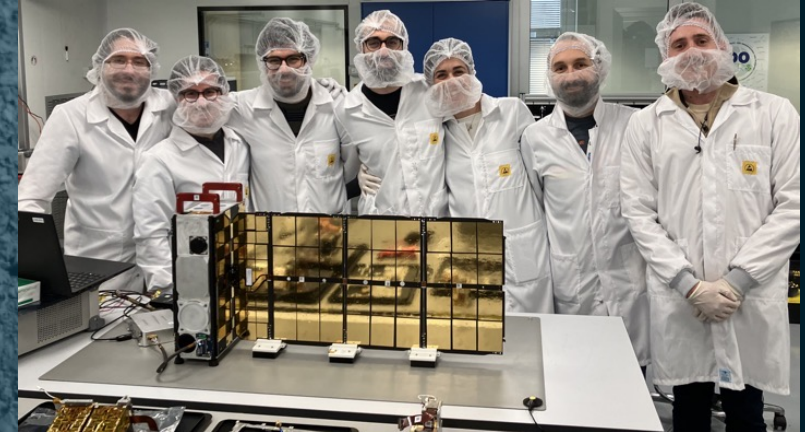


CubeSats status



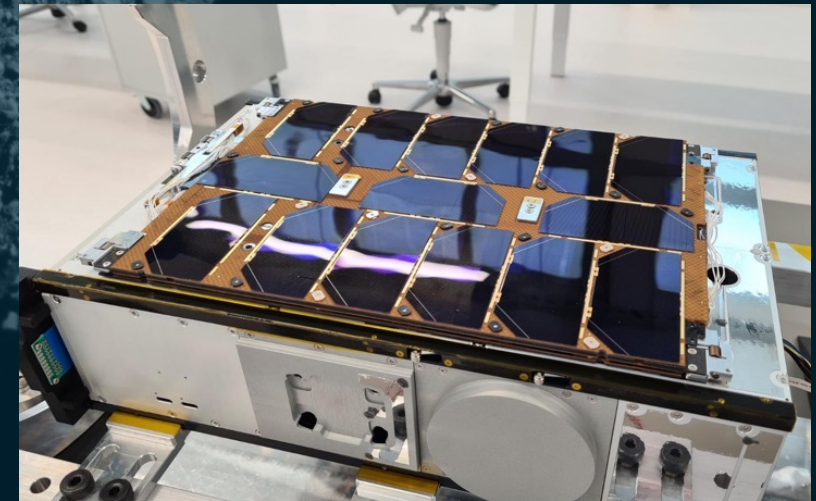
MILANI

- STIM **integrated** in the Hera spacecraft
- rEM completed and delivered to OHB
- All FM HW available, integration of the flight model ongoing
- VISTA FM **delivered**, ASPECT FM **delayed end October**



JUVENTAS

- JuRa PFM **delivered**
- GRASS **delivered**
- STIM **integrated** in the Hera spacecraft
- All FM hardware available, integration ongoing



Launcher procurement status

- Launch service with SpaceX signed
- Site survey planned 12-14 December at NASA KSC
- Discussions ongoing regarding:
 - Air transport to NASA KSC (C-17 or A400M)
 - Payload processing facility (SpaceX vs Astrotech)



Conclusions

- Hera is on track for launch in October 2024: **T – 360 days!**
- Environmental and functional testing to be completed
- CubeSats on track for successful delivery
- Very dense test plan for ground operations
- Software development/debugging will remain critical until launch
- Strong commitment by ESA and industry teams remains key to success
- Funding for European science teams remains critical